Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304 Phone (304) 926-0475 Fax (304) 926-0479



Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

west virginia department of environmental protection

G70-D GENERAL I			
PREVENTION AND CONTROL OF AI RELOCATION, ADMINISTRATIVE U	PDATE AND OP	IN REGARD TO THE CO ERATION OF NATURAL THE WELL SITE	ONSTRUCTION, MODIFICATION, GAS PRODUCTION FACILITIES
APPLICATION NO.: G70-	D <b>215A</b>	FACILITY ID:	095-00071
☐ CONSTRUCTION ☐ MODIFICATION ☐ RELOCATION			OMINISTRATIVE UPDATE DMINISTRATIVE UPDATE
E	BACKGROUNI	INFORMATION	
Name of Applicant (as registered vinc.	vith the WV Se	cretary of State's Off	ice): Jay-Bee Oil & Gas,
Federal Employer ID No. (FEIN):	55-073-8862		
Applicant's Mailing Address: 3570	Shields Hill	Road	
City: Cairo	State: WV		ZIP Code: 26337
Facility Name: Larry Well Pad			4
Operating Site Physical Address: C If none available, list road, city or	off Klondike Action and zip of	cres Road f facility.	
City: Middlebourne	Zip Code: 26	149	County: Tyler
Latitude & Longitude Coordinates Latitude: 39.47509 Longitude: -80.88063	(NAD83, Decir	mal Degrees to 5 digit	
SIC Code: 1311 NAICS Code: 211111		Date Application Ro November 16, 201	
Fee Amount: \$1,500.00		Date Fee Received:	November 17, 2016
Applicant Ad Date: December 14,	2016	Newspaper: Tyler S	Star News
Date Application Complete: Janua	ry 3, 2017	Due Date of Final A	action: February 18, 2017
Engineer Assigned: Roy F. Kees,	P.E.		
Description of Permitting Action: J engine. There are no other propo	ay-Bee is see osed changes	king approval for ins to the facility at this	stallation of a compressor time.

#### PROCESS DESCRIPTION

The following process description was taken from Registration Application G70-D215A:

Jay-Bee is seeking approval for installation of a compressor engine. There are no other proposed changes to the facility at this time.

Currently, Natural gas and Produced Fluids (condensate and water) are received from three wells and passed through Gas Processing Units (one per Marcellus well and two per Utica well) to avoid ice formation during subsequent pressure drops. These materials pass through a three-way separator where gas, condensate and water are separated. All gas fired equipment use natural gas produced at the site as fuel. The Facility will then compress (proposed modification) and then dehydrate the gas. The gas is then injected into a gathering pipeline owned and operated by others.

Both Condensate and Produced Water are accumulated in six (6) 210 BBL tanks (three for Condensate and three for Produced Water), pending truck transportation by others. The Condensate is transported to a regional processing facility and the Produced Water is transported to a regional disposal facility. Flash, working and breathing losses from these tanks is routed to a Vapor Recovery Unit (VRU) with the captured vapors routed back to the raw gas discharge line. An enclosed combustor is utilized as a backup control device for times when the VRU is not available, and is also utilized if a large slug of condensate production generates flash gas in excess of the capacity of the VRU. A capture and control efficiency of 98% is being claimed for this overall combination of controls.

The dehydration unit generates emissions from the still vent and re-boiler. There is no flash tank. Vapors from the still vent are comprised of water and various low molecular weight hydrocarbons. Still vent vapors are routed to an enclosed combustor. A capture and control efficiency of 98% is being claimed for the combustor. Although needs are anticipated to be minimal, supplemental re-boiler fuel is available from the dehydrated gas stream prior to injection into the sales line. Any water condensing in the still vent column is routed to the wastewater tanks.

A Thermo-electric generator to meet the minor electric demands for various monitoring and data tracking equipment has also been installed at this facility.

#### SITE INSPECTION

Site Inspection Date: September 20, 2016

Site Inspection Conducted By: Douglas Hammell

Results of Site Inspection: The inspector reported that the closest house is approximately 800 ft to the

North (min. 300 ft) of the well pad.

Did Applicant meet Siting Requirements? Yes

If applicable, was siting criteria waiver submitted? N/A

Directions to Facility: From Middlebourne, proceed southwest on State Route 18 (Main Street) out of town. Turn right onto Bridgeway Rd. Turn left onto Wick Rd and follow for approximately 2.0 miles. Turn left onto Klondike Acres Rd and follow for approximately 1.5 miles to well pad entrance.

Overhead Google Earth Image of Facility:



## ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The following table indicates which methodology was used in the emissions determination:

Emission Unit ID#	Process Equipment	Calculation Methodology (e.g. ProMax, GlyCalc, mfg. data, AP-42, etc.)
HTR1-HTR3	(3) GPU Heaters	AP-42
HTR4	Line Heater	AP-42
TL-1	Condensate Loading	AP-42
TL-2	Produced Water Loading	AP-42
VRU-1	VRU Compressor Engine	Manufacturer Data / AP-42
TEG-1	Thermoelectric Generator	AP-42
EC-1	Enclosed Combustor	AP-42
T01-T03	(3) Condensate Tanks	GOR / Tanks
T04-T06	(3) Produced Water Tanks	GWR / Tanks
RBV-1	Reboiler	AP-42
RSV-1	Dehy Still Vent	GlyCalc
EC-2	Enclosed Combustor	AP-42
CE-1	Compressor Engine	Manufacturer Data / AP-42

The total facility PTE for the facility (including fugitive emissions) is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)	PTE Change for Modification (tons/year)
Nitrogen Oxides	12.33	+6.66
Carbon Monoxide	15.23	+2.27
Volatile Organic Compounds	21.16	+6.15
Particulate Matter	3.54	+0.50
Particulate Matter-10/2.5	3.54	+0.50
Sulfur Dioxide	0.05	+0.03
Formaldehyde	1.48	+1.41
Total HAPs	3.09	+2.31
Carbon Dioxide Equivalent	14,828.08	+7,667.44

Maximum detailed controlled point source emissions were calculated by the applicant and checked for accuracy by the writer and are summarized in the table on the next page.

APPLICANT: Jay-Bee Oil & Gas, Inc.	L. L	ay-Bee O	il & Gas,	Inc.	FA	CILII	FACILITY NAME: Larry Wellpad	ME: La	ury Well	pad			G70-D215A	215A
Emission Point 1D#	_	NOx		00	>	VOC	Š	SO <sub>2</sub>	P	PM <sub>10</sub>	PN	PM <sub>2.5</sub>	GHG	GHG (CO,e)
	lb/hr	tpy	lb/hr	tpy	1b/hr	tpy	lb/hr	tpv	lb/hr	fnv	lh/hr	144	-4/41	11.11.
HTR1-HTR3	0.45	1.98	0.39	1 65	0.03	0 12	000	100	60.0			(d)	III /O.	10/111
A service of the serv	Washington of the state of the			20.1	5	0.12	00.00	0.01	0.03	0.15	0.03	0.15	543.30	2379.00
HTR-4	0.05	0.22	0.04	0.18	0.00	0.01	0.00	00.0	0.00	0.02	00.0	0.02	60.40	264.00
TL-1	1	1	:	1	2.96	0.91	1	1	1	1	ŀ	1	1	
TL-2	ŀ		-	:	0.08	0.04	1	-		!				TO THE OWNER OF THE OWNER OW
VRIL	01.0	0.01												:
1-001	0.19	0.61	0.37	1.62	0.04	0.18	0.00	0.00	0.01	90.0	0.01	90.0	89.70	393.00
TEG-1	0.00	0.01	0.00	00.00	00.00	0.00	00.00	00.0	00.00	0.00	0.00	00.00	1.60	7.00
T01-T06	1	1	1	1	1.83	8.03	1	;	:		1	;	1	
E	0 00	1 26	1.10	10								-		
	0.23	67.1	1.10	4.81	1.84	0.43	00.0	0.00	0.02	0.07	0.02	0.07	446.60	1956.00
RBV-1	0.05	0.22	0.04	0.18	00.0	0.01	00.00	0.00	0.00	0.02	0.00	0.02	60.40	264 00
EC-2	0.27	1.19	1.03	4.50	0.81	3.54	0.00	0.00	0.04	0.16	0.04	0.16	417 40	1828 10
CE-1	1.52	99:9	0.52	2.27	1.40	6.13	0.01	0.03	0.11	0.50	0.11	0.50	1750 00	7666 00
Fugitives	-	1	1	:	0.41	1.78	1	:	12.90	2.56	ŀ	1	9.30	40.65
TOTAL	2.82	12.33	3.48	15.23	7.57	21.16	0.01	0.05	13.12	3 5/4	13 17	2 64	2000	20.01
									1	F	71.61	40.0	14.0866	14828.08

APPLICANT: Jay-Bee Oil & Gas, Inc.	VT: Jay	-Bee Oil	& Gas, In	10,	FAC	TLIT	NAN	IE: Lar	FACILITY NAME: Larry Wellpad	pı		9	G70-D215A	15.0
Emission Doint ID#	Forma	Formaldehyde	Ber	Benzene	Tol	Toluene	Ethylk	Ethylbenzene	Xyl	Xylenes	Hey	Hexane	Tot	Total HAPs
	lb/hr	tpy	lb/hr	tpy	lb/hr	vaj	1b/hr	, tnv	lb/hr	144	16.75			
carri tarii								Cd.	10/111	tpy	10/01	tpy	lb/hr	lb/hr
niki-Hik3	1	1	:	1	1	ŀ	1	1	1	ŀ	1	!	0.01	0.03
HTR-4	1	1	l	:	1		-		-				00.0	0 00
TL-1	1	-	-	-		-	-				0.16	0.00	0.10	
C 11											01.0	0.00	0.10	0.05
7 – 7	:			-		1	•	ı	ŀ	1	;	ŀ	0.01	0.00
VRU-1	0.02	0.07	0.00	0.00	0.00	0.00	00.0	0.00	00.00	00.00	0.00	0.00	0.02	0.10
TEG-1	ł	1	!	:	1	1	i	ŀ	1	:	1		00 0	
TOI TOK								, market 1	1	The second secon	***************************************		0.00	000
001-101	!	:	1		1	1	1	1	1	1	90.0	0.24	90.0	0.26
EC-1	1	ı	ŀ	1	ı	;	ŀ		:	:	0.00	0.01	0 00	0.00
RBV-1			-	1	1									0.02
							1	;	1	:	:	!	0.00	0.00
EC-2	-	1	l	ŀ	0.03	0.15	ł	ŀ	ŀ	ŀ	0.02	0.00	90.0	0.28
CE-1	0.32	1.41	0.01	0.02	0.01	0.02	0.00	000	00.0	0.01	100	20.0		
To be a first of the second se									0	10.0	0.01	000	0.33	2.31
ı uğılıvcs		-	1		I	1	!	1	1	1	1	ļ	00.00	0.02
TOTAL	0.34	1.48	0.02	0.07	0.04	0.18	0.00	0.00	0.00	0 00	700	0 50	20 0	000
Charles and the second	Words Systematical Community Community								0	10.0	77.0	00.0	0.80	7 (12)

#### REGULATORY APPLICABILITY

## 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers) is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units.

45CSR2 states that any fuel burning unit that has a heat input under ten (10) MMBTU/hr is exempt from Sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date. If the individual heat input of all of the proposed fuel burning units are below 10 MMBTU/hr, these units are exempt from the aforementioned sections of 45CSR2. However, the registrant would be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
HTR1-HTR3	(3) GPU Heaters	1.50 Each
HTR-4	Line Heater	0.50
TEG-1	Theremoelectric Generator	4.4 KW/hr
RBV-1	Reboiler	0.50

## 45CSR6 (To Prevent and Control Air Pollution from the Combustion of Refuse)

45CSR6 prohibits open burning, establishes emission limitations for particulate matter, and establishes opacity requirements. Sources subject to 45CSR6 include completion combustion devices, enclosed combustion devices, and flares.

The facility-wide requirements of the general permit include the open burning limitations  $\S\S45$ -6-3.1 and 3.2.

All completion combustion devices, enclosed combustion devices, and flares are subject to the particulate matter weight emission standard set forth in \$45-6-4.1; the opacity requirements in \$45-6-4-3 and 4-4; the visible emission standard in \$45-6-4.5; the odor standard in \$45-6-4.6; and, the testing standard in \$45-6-7.1 and 7.2.

Enclosed combustion control devices and flares that are used to comply with emission standards of NSPS, Subpart OOOO are subject to design, operational, performance, recordkeeping and reporting requirements of the NSPS regulation that meet or exceed the requirements of 45CSR6.

Emission Unit ID#	Maximum Design Heat Input (MDHI) (MMBTU/hr)	We Emi	ect to ight ssion dard?	Control Efficiency Claimed by Registrant	Provide Justification how 45CSR6 is met.
EC1-EC2	10.00 Each	X Yes	□ No	98	Assuming 20,000 BTU/lb, the allowable PM emissions are 1.36 lb/hr. Using AP-42, the PM emissions were calculated to be 0.05 lb/hr.

### 45CSR10 (To Prevent and Control Air Pollution from the Emission of Sulfur Oxides)

45 CSR10 establishes emission limitations for  $SO_2$  emissions which are discharged from stacks of fuel burning units. A "fuel burning unit" means and includes any furnace, boiler apparatus, device, mechanism, stack or structure used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer. Sources that meet the definition of "Fuel Burning Units" per 45 CSR10-2.8 include GPUs, inline heaters, heater treaters, and glycol dehydration unit reboilers.

Fuel burning units less than 10 MMBtu/hr are exempt. The sulfur dioxide emission standard set forth in 45CSR10 is generally less stringent than the potential emissions from a fuel burning unit for natural gas. The  $SO_2$  emissions from a fuel burning unit will be listed in the G70-D permit registration at the discretion of the permit engineer on a case-by-case basis. Issues such as non-attainment designation, fuel use, and amount of sulfur dioxide emissions will be factors used in this determination. Fuel burning units greater than 10 MMBTU/hr are ineligible for registration under General Permit G70-D

Fuel burning units burning natural gas are exempt from Section 8 (Monitoring, Recording and Reporting) as well as interpretive rule 10A. The G70-D eligibility requirements exclude from eligibility any fuel burning unit that does not use natural gas as the fuel; therefore, there are no permit conditions for 45CSR10.

Emission Unit ID#	Emission Unit Description	Maximum Design Heat Input (MDHI) (MMBTU/hr)
HTR1-HTR3	(3) GPU Heaters	1.50 Each
HTR-4	Line Heater	0.50
TEG-1	Theremoelectric Generator	4.4 KW/hr
RBV-1	Reboiler	0.50

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that the applicant is defined as a "stationary source" under 45CSR13 Section 2.24.b. Stationary source means, for the purpose of this rule, any building, structure, facility, installation, or emission unit or combination thereof, excluding any emission unit which meets or falls below the criteria delineated in Table 45-13B which: (a) is subject to any substantive requirement of an emission control rule promulgated by the Secretary; (b) discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant; (c) discharges or has the potential to discharge more than two (2) pounds per hour or five (5) tons per year of hazardous air pollutants considered on an aggregated basis; (d) discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or greater; or, (e) an owner or operator voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though not otherwise required to do so. 45CSR13 has an original effective date of June 1, 1974.

The applicant meets the definition of a stationary source because (check all that apply):

	Subject to a substantive requirement of an emission control rule promulgated by the Secretary.
$\boxtimes$	Discharges or has the potential to discharge more than six (6) nounds per hour and ten (10) tons per year or
	has the potential to discharge more than 144 pounds per calendar day, of any regulated air pollutant
$\Box$	Discharges or has the potential to discharge more than two (2) nounds per hour or five (5) tons per year of
	nazardous air pollutants considered on an aggregated basis
Ш	Discharges or has the potential to discharge any air pollutant(s) listed in Table 45-13A in the amounts shown in Table 45-13A or any air pollutant (s) listed in Table 45-13A in the amounts shown
	in Table 45-15A or greater.
Ш	Voluntarily chooses to be subject to a construction or modification permit pursuant to this rule, even though
	not otherwise required to do so.

General Permit G70-D Registration satisfies the construction, modification, relocation and operating permit requirements of 45CSR13. General Permit G70-D sets forth reasonable conditions that enable eligible registrants to establish enforceable permit limits.

Section 5 of 45CSR13 provides the permit application and reporting requirements for construction of and modifications to stationary sources. No person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without notifying the Secretary of such intent and obtaining a permit to construct, modify, relocate and operate the stationary source as required in the rule or any other applicable rule promulgated by the Secretary.

If applicable, the applicant meets the following (check all that apply):
Relocation Modification Class I Administrative Update (45CSR13 Section 4.2.a) Class II Administrative Update (45CSR13 Section 4.2.b)
45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)
45CSR16 applies to all registrants that are subject to any of the NSPS requirements described in more detail in the Federal Regulations section. Applicable requirements of NSPS, Subparts IIII, JJJJ and OOOO are included in General Permit G70-D.
The applicant is subject to:
40CFR60 Subpart IIII 40CFR60 Subpart JJJJ 40CFR60 Subpart OOOO
40CFR60 Subpart JJJJ
40CFR60 Subpart OOOO

#### 45CSR22 (Air Quality Management Fee Program)

45CSR22 is the program to collect fees for certificates to operate and for permits to construct or modify sources of air pollution. 45CSR22 applies to all registrants. The general permit fee of \$500 is defined in 45CSR13. In addition to the application fee, all applicants subject to NSPS requirements or NESHAP requirements shall pay additional fees of \$1,000 and \$2,500, respectively.

Registrants are also required to obtain and have in effect a valid certificate to operate in accordance with 45CSR22 §4.1. The fee group for General Permit G70-D is 9M (all other sources) with an annual operating fee of \$200.

# 40CFR60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines)

Subpart IIII sets forth non-methane hydrocarbon (NMHC), hydrocarbon (HC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary compression ignition (CI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G70-D, Section 13. The following CI engines are subject to this section:

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	Provide Justification how 40CFR60 Subpart IIII is met.
N/A				☐ Met Emission Standard ☐ Certified Engine

## 40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines)

Subpart JJJJ sets forth nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compound (VOC) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The provisions for stationary spark ignition (SI) internal combustion engines for owners or operators of this Subpart have been included in General Permit G70-D, Section 13.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	Provide Justification how 40CFR60 Subpart JJJJ is met.
VRU-1	Cummins G5.9	84	>3/1/2013	Met Emission Standard     □ Certified Engine
CE-1	Caterpillar G3516 BLE	1380	3/21/2012	<ul><li>✓ Met Emission Standard</li><li>✓ Certified Engine</li></ul>

## 40CFR60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution)

EPA published its New Source Performance Standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. EPA published final amendments to the Subpart on September 23, 2013.

40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO<sub>2</sub>) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. The affected sources which commence construction, modification or reconstruction after August 23, 2011 are subject to the applicable provisions of this Subpart as described below:

#### Gas well affected facilities are included in General Permit G70-D in Section 5.0.

Are there any applicable gas well affected facilities? 

Yes No If Yes, list.

API number(s) for each Gas Well at this facility	Date the Gas Well was drilled or re-fractured
047-095-02315	Completed 12/2016
047-095-02334	Completed 12/2016

Centrifugal compressor affected facilities are included in General Permit G70-D, Section 11.0.

Are there any applicable centrifugal compressor affected facilities not located at the well site?

☐ Yes X No If Yes, list.

Engine Description (Make, Model)	
N/A	

Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this Subpart.

Reciprocating compressor affected facilities are included in General Permit G70-D, Section 12.0.
Are there any applicable reciprocating compressor affected facilities not located at the well site?
☐ Yes X No
If Yes, list.
Engine Description
(Make, Model)
N/A
Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.
Pneumatic controllers affected facilities are included in General Permit G70-D, Section 10.0.
Are there any applicable pneumatic controller affected facilities?   Yes X No
For the natural gas production segment (between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not including natural gas processing plants), each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh.
Requirements for storage vessel affected facilities are included in General Permit G70-D, Section 7.0. Determination of storage vessel affected facility status is included in Section 6.0 of General Permit G70-D.
Are there any applicable storage vessel affected facilities?   Yes X No
If No, list any emission reduction devices and control efficiencies used to avoid 40CFR60 Subpart OOOO.
Enclosed Combustor EC-1, 10.00 MMBtu/hr, 98% Control
If Yes, list.

Emission	Storage Vessel Description	SV Size	Provide Justification how 40CFR60
Unit ID#		(gal)	Subpart OOOO is met.
N/A			•

Each storage vessel affected facility, which is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment, and has the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section by October 15, 2013 for Group 1 storage vessels and by April 15, 2014, or 30 days after startup (whichever is later) for Group 2 storage vessels. A storage vessel affected facility that subsequently has its potential for VOC emissions decrease to less than 6 tpy shall remain an affected facility under this subpart.

#### 40CFR63 Subpart HH (National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities)

This Subpart applies to owners and operators of each triethylene glycol (TEG) dehydration unit that are located at oil and natural gas production facilities. Only areas source requirements are included in General Permit G70-D, as defined in §63.761.

For area source applicability, the affected source includes each trietheylene glycol (TEG) dehydration unit located at a facility that meets the criteria specified in §63.760(a).

Glycol dehydration unit(s) are included in General Permit G70-D, Section 15.0.

## 40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This Subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. This section reflects EPA's final amendments to 40 CFR part 63, Subpart ZZZZ that were issued on January 15, 2013 and published in the Federal Register on January 30, 2013.

WVDEP DAQ has delegation of the area source air toxics provisions of this Subpart requiring Generally Achievable Control Technology (GACT). The provisions of this Subpart have been included in this general permit under Section 13.0.

Emission Unit ID#	Engine Description (Make, Model)	Engine Size (HP)	Date of Manufacture	New or Existing under 40CFR63 Subpart ZZZZ?	Provide Justification how 40CFR63 Subpart ZZZZ is met.
VRU-1	Cummins G5.9	84	>3/1/2013	New	1111
CE-1	Caterpillar G3516 BLE	1380	3/21/2012	New	1111

Are there any engines that fall in the window of b	being new	under 40CFR60 S	Subpart ZZZZ but manufactured before
the applicability date in 40CFR60 Subpart JJJJ?	□ Yes	X No	

If so, list the engines: N/A

SOURCE AGGREGATION DETERMINATION
"Building, structure, facility, or installation" is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.
Are there surrounding wells or compressor stations under "common control" of the applicant?
Are the properties in question located on "contiguous or adjacent" properties?  Yes X No
Are there surrounding facilities that share the same two (2) digit SIC code?  Yes X No
Final Source Aggregation Decision.  Source not aggregated with any other source.  Source aggregated with another source. List Company/Facility Name:
RECOMMENDATION TO DIRECTOR
The information provided in the permit application, including all supplemental information received, indicates the applicant meets all the requirements of applicable regulations and the applicant has shown they meet the eligibility requirements of General Permit G70-D. Therefore, impact on the surrounding area should be minimized and it is recommended that the facility should be granted registration under General Permit G70-D.
Permit Engineer Signature:  Name and Title: Roy F. Kees, P.E. Engineer, NSR Permitting  Date: January 17, 2017